

HIGH-SPEED IMAGING METHODS FOR RESEARCH AND EXPERIMENTATION

September 26 - 29, 2017 | Golden, CO | Colorado School of Mines

About this course...

A hands-on, world-class short course offered by the Colorado School of Mines Advanced Explosives Processing Research Group (AXPRO).

Vision Research, a world leader in digital high speed imaging, is sponsoring the course. The focus is on experimentation techniques with explosives and ballistics. **Mr. Frank Mazella**, Learning Products Manager at Vision Research, will be instructing.

Students will be working one-on-one with instructors on specific technical problems of high-speed imagery and camera setups.

Registration Information

For registration please visit our website :<http://www.csm.space.com/events/hispeedimg/> For questions about registration, please contact Office of Special Programs and Continuing Education: (303) 279-5563 or space@mines.edu.

For technical course or registration questions please contact **Dr. Vilem Petr (303)273-3232** or email: vpetr@mines.edu.

Please visit our website AXPRO.MINES.EDU

Course Content

A wide range of material will be covered including: detonation and shock wave physics, an introduction to high-speed imaging, lighting and selecting lenses for the best results, triggering strategies, analysis of high-speed imagery, and more.



Registering

The registration types(s) and fee(s) for *High-Speed Imaging Methods for Research and Experimentation* are shown below:

- Regular Attendees - \$2,495 (USD)
- Regular Attendees (on-site registration) - \$2,695 (USD)

Day 1 - Tuesday

Introduction to High-Speed Imaging
Laboratory Safety
Lenses and Optics in High-Speed
Videos
Illumination and Light Consideration
Triggering
Welcome Reception

Day 2 - Wednesday

Introduction to Phantom Camera
Controls
Classroom Exercises
Introduction to High-Speed Motion
Analysis Software
Data Analysis

Day 3 - Thursday

Practical Training at the Explosives
Research Laboratory (ERL)
Group Test Results and Analysis
**Personal Protective Equipment is
Required**

Day 4 - Friday

Practical Training
Group Test Results and Analysis
w/Motion Analysis Software
Group Presentation
Q&A, Evaluations, and Certificates